The Examiner rejected claims 19, 21 to 22 and 24 to 28, i.e. all pending claims, under 35 USC 103(a) as being obvious over Murdin et al (US Patent No. 6,686,339) in light of WO 92/11361. Reconsideration is requested.

Claim 19 claims an attenuated strain of an auxotrophic bacterium harbouring a vector comprising a nucleic acid molecule encoding a major outer membrane protein (MOMP) of a strain of *Chlamydia* and a promoter operatively coupled to the nucleic acid molecule for expression of MOMP by cells of a host to which the strain is administered but not by the attenuated bacterium. Claims 21 to 22 and 24 to 28 are dependent, directly or indirectly, on claim 19.

Claim 19, therefore, is limited to an attenuated strain of an auxotrophic bacterium harbouring a vector comprising a nucleic acid molecule encoding a MOMP of a strain of *Chlamydia*. The promoter operatively coupled to the nucleic acid molecule ensures that the MOMP is expressed in a host to which the strain is administered but not by the attenuated bacterium.

In the Final Action, the Examiner indicates that:

> "Murdin et al teach, suggest and provide guidance for the formulation of instantly claimed invention."

In this regard, the Examiner indicates:

> "see Murdin et al: "In the C. pneumoniae genome, open reading frames (ORFs) encoding chlamydial polypeptides have been identified. These polypeptides include polypeptides permanently found in the bacterial membrane structure, polypeptides that are present in the external vicinity of the bacterial membrane, include polypeptides permanently found in the inclusion membrane structure, polypeptides that are present in the external vicinity of the inclusion membrane, and polypeptides that are released into the cytoplasm of the infected cell. These polypeptides can be used in vaccination methods for preventing and treating Chlamydia infection'" (Examiner's emphasis).

This passage is contained in col. 5, ll 32 to 42 of Murdin et al US 6,686,339. This statement is but a generality and does not point to applicants invention.

Murdin et al US 6,686,339 discloses an expression vector comprising a nucleic acid encoding a *Chlamydia* immunogen operatively linked to a control sequence in a plasmid which may be included in a live vaccine vector, including *Salmonella typhimurium*. However, the specific nucleic acid molecule with which Murdin et al US 6,686,339 is involved is that encoding inclusion membrane protein C and not MOMP, with which applicants claims are involved.

As indicated in response to the prior Office Action, inclusion membrane protein C (IPC) and POMP91A (see discussion below with respect to Murdin et al US 6,693,087) are quite different proteins from each other and from MOMP. Applicants submitted the protein sequences and their comparison in response to the prior Office Action and we enclose a further copy for the Examiner's convenience.

While MOMP is mentioned in Murdin et al US 6,693,087, it is in the context of this protein being a known immunogen of *Chlamydia*. However, there is no disclosure to suggest that the nucleic acid sequence encoding MOMP may replace the nucleic acid molecule encoding inclusion membrane protein C in the live vectors of Murdin et al, USP 6,693,087.

WO 92/11361 is relied on solely for a showing of *Salmonella typhimurium* auxotrophic attenuated strains, the Examiner referring to page 4, paras 3 to 4. However, this reference contains no mention of *Chlamydia*.

Accordingly, it is submitted that the combination of cited prior art does not suggest the replacement of the nucleic acid encoding inclusion membrane C of *Chlamydia* with a nucleic acid molecule encoding MOMP. It is submitted, therefore, that the rejection of claims 19, 21 to 22 and 24 to 28 under 35 USC 103(a) as being unpatentable over Murdin et al (USP 6,686,339) is light of WO 92/11361, should be withdrawn.

The Examiner rejected claims 19, 21 to 22 and 24 to 28 under 35 USC 103(a) as being unpatentable over Murdin et al (USP 6,693,087) in light of WO 92/11361. Reconsideration is requested. This rejection is the same as that discussed above, except for the utilization of a different Murdin et al reference. Murdin et al, USP 6,693,087 relates to a different protein from the inclusion membrane protein C with which Murdin et al, US Patent No. 6,686,339 is concerned, namely POMP91A protein of a strain of Chlamydia.

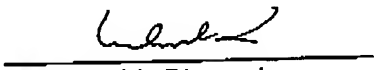
Applicants remarks above with respect to the relevance of Murdin et al, USP 6,686,339 apply equally to Murdin et al USP 6,693,087 and are incorporated herein by reference.

Having regard thereto, it is submitted that claims 19, 21 to 22 and 24 to 28 are patentable over the applied combination of Murdin (USP 6,693,087) in view of WO 92/11361 and hence the rejection thereof under 35 USC 103(e) as being unpatentable over the applied prior art, should be withdrawn.

Entry of this Request for Reconsideration should be made, in that the application thereby is placed in condition for acceptance.

It is believed that this application is now in condition for allowance and early and favourable consideration and allowance are respectfully solicited.

Respectfully submitted,



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